# English $4^{\text {th }}$ Grade A-L Vocabulary Cards and Word Walls 

Revised: 2/10/14

## Important Notes for Teachers:

- The vocabulary cards in this file match the Common Core, the math curriculum adopted by the Utah State Board of Education, August 2010.
- The cards are arranged alphabetically.
- Each card has three sections.
- Section 1 is only the word. This is to be used as a visual aid in spelling and pronunciation. It is also used when students are writing their own "kid-friendly" definition and drawing their own graphic.
- Section 2 has the word and a graphic. This graphic is available to be used as a model by the teacher.
- Section 3 has the word, a graphic, and a definition. This is to be used for the Word Wall in the classroom. For more information on using a Word Wall for Daily Review - see "Vocabulary - Word Wall Ideas" on this website.
- These cards are designed to help all students with math content vocabulary, including ELL, Gifted and Talented, Special Education, and Regular Education students.

For possible additions or corrections to the vocabulary cards, please contact the Granite School District Math Department at 385-646-4239.

Bibliography of Definition Sources:
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## a.m.

## a.m.



A time between 12:00 midnight and 12:00 noon.

## acute angle

## acute angle



## acute angle



An angle with a measure less than $90^{\circ}$.

## acute triangle

## acute

## triangle


acute triangle


A triangle with no angle measuring $90^{\circ}$ or more.

## add

## add


$2+3=5$

## add <br> 

To combine; put together two or more quantities.

## addend

## addend

## $5+3+2=10$

addends

$$
5+3+2=10
$$

## addend

Any number
being added.
addends

## additive comparison

## additive

 comparison

How many more hearts than stars are there?

additive comparison



Problems that ask how much more
(or less) one amount is than another.

Additive Identity

## Property of 0

## Additive Identity

Property of 0


Additive Identity Property of 0


$$
4+0=4
$$

Adding zero to a number gives a sum identical to the given number.

## algorithm

## 24 <br> algorithm <br> $\frac{\times 3}{12}$ Multiply the ones. $3 \times 4=12$ <br> +60 Multiply the tens. $3 \times 20=60$ <br> 72 Add the partial products.

## angle

## angle




Two rays or line segments that share an endpoint.

## angle measure

angle<br>measure



\author{

## angle

 measure}


The measure of the size

## arc

## arc



## arc



Part of a circle's curve between any two of its points.

## area

## $\mathbf{2}$ rows of $\mathbf{5}=\mathbf{1 0}$ square units or

## $\mathbf{2 \times 5} \mathbf{5} \mathbf{1 0}$ square units



2 rows of $\mathbf{5}=\mathbf{1 0}$ square units
or
$2 \times 5=10$ square units


The measure, in square units, of the inside of a plane figure.

## area model


area model


A model of multiplication that shows each place value product.

$$
9 \times 28=(9 \times 20)+(9 \times 8)=252
$$

## array

## 3 rows of 5 $3 \times 5$ <br> array <br> 

3 rows of 5
$3 \times 5$
array


An arrangement of objects in equal rows.

Associative Property

## of Addition

# Associative <br> Property <br> of Addition 

$$
\begin{aligned}
(5+7)+3 & =5+(7+3) \\
12+3 & =5+10 \\
\mathbf{1 5} & =\mathbf{1 5}
\end{aligned}
$$

Associative Property of Addition

$$
\begin{aligned}
(5+7)+3 & =5+(7+3) \\
12+3 & =5+10 \\
15 & =15
\end{aligned}
$$

Changing the grouping of three or more addends does not change the sum.

Associative Property of Multiplication

Associative<br>Property of Multiplication

$$
\begin{aligned}
(5 \times 7) \times 3 & =5 \times(7 \times 3) \\
35 \times 3 & =5 \times 21 \\
105 & =105
\end{aligned}
$$

Associative<br>Property of Multiplication

$$
\begin{aligned}
(5 \times 7) \times 3 & =5 \times(7 \times 3) \\
35 \times 3 & =5 \times 21 \\
105 & =105
\end{aligned}
$$

Changing the grouping of three or more factors does not change the product.

## attribute

## attribute

## large

triangle

## pink



A characteristic of an object, such as color, shape, size, etc.

## bar model

bar model


Amy had 5 baseball cards. Jeff had 3 times as many cards as Amy. How many baseball cards did they have altogether?


## base

## base




Any side of a plane
figure. Usually thought
of as a side where the figure "sits."

## base-ten numeral form

## base-ten numeral form



3 is in the hundreds place. It has a value of
3 hundreds or 300.

## base-ten

 numeral form

3 is in the hundreds place.
It has a value of
3 hundreds or 300.

A common way of writing a number using digits. The value of a numeral depends on where it appears in the number.
(also known as standard form)

## base-ten numerals

## base-ten <br> 01 <br>  <br> 4 numerals <br> 



Any of the symbols $0,1,2$, $3,4,5,6,7,8$, or 9 .
The symbols can represent any amount based on a place value system of grouping by tens. (also known as digits)

## benchmark

## benchmark



You can walk 1 mile in about 20 minutes.

## benchmark



A known size or amount that can be used as a reference to help understand a different size or amount.
A benchmark can be used to estimate measurement.

## benchmark

 fractions
## benchmark fractions



$\frac{4}{5}>\frac{3}{8}$

Fractions that are commonly used for estimation. A benchmark fraction helps you compare two fractions.

## capacity

## capacity




Capacity refers to the amount of liquid a container can hold.

## centimeter (cm)

## centimeter

(cm)

centimeter (cm)


A metric unit of length equal to 0.01 of a meter.

## circle

## circle

A plane figure with all points the same distance from a fixed point called a center.

## classify

## classify



## classify



To sort into categories or to arrange into groups by attributes.

## clockwise

## clockwise




The same direction that the hands on a clock move.

## common denominator

common denominator

12 is a common denominator for:
$\frac{2}{3}$ and $\frac{3}{4}$
common denominator

12 is a common denominator for:
$\frac{2}{3}$ and $\frac{3}{4}$

For two or more fractions, a common denominator is a common multiple of the denominators.

## common factor

## common

 factorCommon Factors of 12 and 18:
$1,2,3,6$
$12(1,2,3,4,6,12)$
$18(1,2,3,6,9,18)$

## common

 factor
## common multiple

## common multiple

4, 8, 12, 16, 20, 24, 28, 32, 36... 6, 12, 18, 24, 30, 36, 42...

Common Multiples of 4 and 6: 12, 24, 36...

Any common multiple of two or more numbers.

4, 8, 12, 16, 20, 24, 28, 32, 36... 6, 12, 18, 24, 30, 36, 42...<br>Common Multiples of 4 and 6:<br>\section*{common multiple} 12, 24, 36...

## common numerator

common numerator

4 is a common numerator for:
$\frac{4}{5}$ and $\frac{2}{3}$

## 4 is a common

## common <br> numerator for:

 numerator$\frac{4}{5}$ and $\frac{2}{3}$

For two or more fractions, a common numerator is a common multiple of the numerators.

## Commutative Property of Addition

Commutative Property of Addition
이이이 = 40|0|0|0

$$
3+2=2+3
$$

Commutative

Property of Addition
미이이 = 미이이

$$
3+2=2+3
$$

## Commutative Property

## of Multiplication

## Commutative Property of Multiplication



Commutative Property of Multiplication


Changing the order of the factors does not change the product.

## compare

## compare



4 is more than 3.

## compare



To decide if one number is greater than, less than, or equal to.
4 is more than 3.

## compatible numbers

## compatible <br> $57 \longrightarrow 60$ numbers <br> $\underline{\times 23} \longrightarrow \underline{25}$

## compose

## compose

## $300+40+2$ <br> 342

## compose

## $300+40+2$

To put together smaller numbers to make larger numbers.
342

## composite number

## composite

 number

6 is a composite number.

composite number


$1 \times 6=6$

$2 \times 3=6$
6 is a composite number.

A number greater than 0 that has more than two different factors.

## congruent

## congruent



## 

Having exactly the same size
and shape.

## counterclockwise

## counterclockwise



## counterclockwise



The opposite direction that the hands move on a clock.

## counting number

counting number number


A whole number that can be used to count a set of objects.

Counting numbers do not include 0 . (e.g., 1, 2, 3, 4...)

## cup <br> (c)

## cup (c)




A customary unit of capacity.<br>1 cup $=8$ fluid ounces

## customary system

# customary 

 systemcustomary



A system of measurement used in the U.S. The system includes units for measuring length, capacity, and weight.

## data

## data

data collecting

data collecting
data


A collection of information gathered for a purpose.
Data may be in the form of either words or numbers.

## day

## day

## day



The length of time it takes the Earth to make a complete rotation. 24 hours = 1 day

## decimal

## decimal

## $\$ 29.4553 .0$ 0.02

## decimal

## \$29.45 53.0 0.02

A number with one or more digits to the right of a decimal point.

# decimal fraction 

## decimal

 fraction
decimal fraction


$$
0.38=\frac{38}{100}
$$

A fractional number with a denominator of 10 or a power of 10 .
It can be written with a decimal point.

## decimal point

## decimal point <br> \$1.55 $\dagger \quad \dagger$ decimal point

## decimal point <br> \$1.55 <br> 4 <br> 3.2 <br> $\dagger$decimal point

A dot (.) separating the whole number from the fraction in decimal notation.

## decimeter



A hand span is about 1 decimeter.

## decimeter



A metric unit of length. 1 decimeter $=0.1$ meter
10 decimeters $=1$ meter

A hand span is about 1 decimeter.

## decompose

## decompose



## 342

decompose


To separate a number into 2 or more parts.
$300+40+2$

# degree (angle measure) 

# degree <br> (angle measure) 



## degree <br> (angle measure)



A unit for measuring angles. It is based on dividing one complete circle into 360 equal parts.

## denominator

## denominator



- Equal parts described in fraction
- Equal parts in the whole


## denominator

$\frac{1}{3}$

- Equal parts described in fraction
- Equal parts in the whole

The number written below the line in a fraction. It tells how many equal parts are in the whole.

## diagonal

## diagonal



## diagonal



A line that goes through vertices of a polygon that are not next to each other.

## difference

## difference <br> $289-146=143$ difference

## $289-146=143$ <br> 

The amount that
remains after one quantity is subtracted from another.

## digit

## digit

# 01234 56789 

## digit

# 01234 56789 

Any of the symbols $0,1,2,3,4,5,6$, 7,8 , or 9 .
(also known as base-ten numerals)

## Distributive Property

## Distributive Property



## Distributive Property

|  | 10 | 4 | When one of the factors of a product is a sum, multiplying each addend before adding does not change the product. |
| :---: | :---: | :---: | :---: |
| 6 | $6 \times 10=60$ | $6 \times 4=24$ |  |
|  | $\begin{aligned} 6 \times 14 & =6 \times(10+4) \\ & =(6 \times 10)+(6 \times 4) \\ & =60+24 \\ & =84 \end{aligned}$ |  |  |

## divide

## divide


$15 \div 3=5$
divide

$15 \div 3=5$

To separate into equal groups and find the number in each
group or the number of groups.

## dividend

## dividend



A number that is divided by another number.

## divisible

## divisible



8 is divisible by 2 because there is no remainder.

$$
8 \div 2=4
$$

## divisible



8 is divisible by 2 because there is no remainder.

$$
8 \div 2=4
$$

A number is divisible by another number if the quotient is a counting number without a remainder.

## divisor


divisor


The number by which another
number is divided.

## elapsed time

## elapsed time

## elapsed time



The amount of time that has passed.
(also known as time interval)

## endpoint

## endpoint <br> endpoint <br>  <br> endpoint <br> segment

## equal



These expressions balance the scale because they are equal.

$$
13+5=10+8
$$



Having the same value.

These expressions balance the scale
because they are equal.

## equation

equation


## equation



A mathematical sentence with an equal sign. The amount on one side of the equal sign has the same value as the amount on the other side.

## equiangular triangle

## equiangular triangle



## equiangular triangle



A triangle with all
equal angles $\left(60^{\circ}\right)$.

## equilateral triangle

## equilateral

 triangle

## equilateral triangle



A triangle with all sides the same length.

# equivalent decimals 

equivalent decimals

$0.7=0.70$
equivalent decimals


$$
0.7=0.70
$$

## equivalent fractions

equivalent

$\frac{2}{4}$ fractions

equivalent fractions


Fractions that have the same value.

## estimate

## estimate



How many jelly beans are in the jar?

## estimate

How many jelly
beans are in the jar?

A number close to an exact amount. An estimate tells about
how much or
about how many.

## expanded form

## expanded

## $263=200+60+3$

form

# expanded <br> $263=200+60+3$ 

A way to write numbers that shows the place value of each digit.

## expression

## expression <br> 

## fact family

fact

## family

## Fact Family for 3, 5, 15

$$
\begin{array}{ll}
3 \times 5=15 & 15 \div 5=3 \\
5 \times 3=15 & 15 \div 3=5
\end{array}
$$

fact family

## Fact Family for 3, 5, 15

$$
\begin{array}{ll}
3 \times 5=15 & 15 \div 5=3 \\
5 \times 3=15 & 15 \div 3=5
\end{array}
$$

A group of related facts that use the same numbers.
(also known as related facts)

## factor

## factor

## $2 \times 6=12$ <br> factors

factor
$2 \times 6=12$
factors

The whole numbers that are multiplied to get a product.

## factor pairs

$2 \times 3=6$－
$1 \times 6=6$ 東東東果
The factor pairs for 6 are：
2 and 3
$1 \times 6=6$－
The factor pairs for 6 are： 2 and 3
1 and 6

## fluid ounce

## fluid ounce



## fluid ounce



A customary unit of capacity. 8 fluid ounces $=1$ cup

## foot (ft)

## foot (ft)

$\mathbf{1 2}$ inches $=\mathbf{1}$ foot

$\mathbf{1 2}$ inches $=\mathbf{1}$ foot
foot (ft)

A customary unit of length.
1 foot $=12$ inches

## formula

## formula

To find the area of any rectangle, multiply its length by its width.
This rule can be written as an equation:

$$
A=l \times w
$$

To find the area of any rectangle, multiply its length by its width.

This rule can be written as an equation:

$$
A=l \times w
$$

A general mathematical rule that is written as an equation.

## fraction

\section*{| Measurement Model | Set <br> Model | Area <br> Model |
| :---: | :---: | :---: |
| 〇〇 | $)$ |  | <br> <br> fraction <br> <br> fraction <br> Bar Diagram (thickened number line) <br> What is $\frac{3}{4}$ ?}

Measurement
Model


Bar Diagram (thickened number line)

Set Model


What is $\frac{3}{4}$ ?

A way to describe a part of a whole or a part of a group by using equal parts.

## fraction bar

## fraction bar



## fraction bar



A horizontal bar that separates the numerator and the denominator.

## fraction greater

## than one

## fraction greater

 than one
fraction greater than one

A fraction with a numerator greater than its denominator.

## fraction less

## than one

## fraction less

 than one

## fraction less than one

## gallon (gal)

## gallon (gal)




A customary unit of capacity.<br>1 gallon $=4$ quarts

## gram <br> (g)

The mass of a paperclip is about 1 gram.

## gram (g)



The mass of a paperclip
is about 1 gram.

## gram (g)

The standard unit of mass in the metric system.
1,000 grams $=1$ kilogram

## greater than

## greater than


greater than


Greater than is used to compare two numbers when the first number is larger than the second number.

## half gallon

## half gallon



A customary unit of capacity.

$$
\frac{1}{2} \text { gallon }=2 \text { quarts }
$$

## height

## height <br>  <br> h <br> 



A perpendicular line
segment from the
base to the top of the figure.

## hexagon

## hexagon




A polygon with 6 sides.

## horizontal

## horizontal



## horizontal



Parallel to the horizon. Horizontal lines go from left to right.

## hour (hr)

## hour (hr)



A unit of time.
1 hour $=60$ minutes 24 hours $=1$ day

## hundreds

## hundreds



| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{3}$ |

## hundreds



| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
| 2 | 4 | 3 |

The value of a digit that is the third position from the right when describing whole number place value.

## hundredth

## hundredth



## hundredth



One of the equal parts when a whole is divided into 100 equal parts.

## hundredths

## hundredths

## hundredths <br>  <br> In the decimal numeration system, hundredths is the name of the next place to the right of tenths.

## inch (in)

## inch (in) <br> 

## inch (in)



A customary unit of length.
12 inches $=1$ foot

## intersecting lines

## intersecting lines


intersecting lines


Lines that cross at a point.

## interval

## interval



## interval



The distance between two points.

## inverse operations

inverse operations

## Multiplication and division

 are inverse operations.$$
\begin{aligned}
& 8 \times 5=40 \\
& 40 \div 5=8
\end{aligned}
$$

inverse operations

## Multiplication and division

 are inverse operations.$$
\begin{aligned}
& 8 \times 5=40 \\
& 40 \div 5=8
\end{aligned}
$$

Operations that undo each other.

## isosceles triangle

isosceles triangle


## isosceles <br> triangle



A triangle that has exactly 2 equal sides.

## kilogram (kg)

## kilogram

 (kg)

Math book
About $2 \frac{1}{2}$ pounds
kilogram (kg)


Math book
About $2 \frac{1}{2}$ pounds

A metric unit of mass equal to 1000 grams.

## kilometer (km)

# kilometer 

## (km)



## kilometer

(km)


A kilometer (km) is about the length of 4 city blocks.

A metric unit of length equal to 1000 meters.

## length

## length




How long something is. The distance from one point to another.
Length is measured in units such as inches, feet, centimeters, etc.

## length (l)

## length (l)


length

## length ( $l$ )



One dimension of a two- or three-
dimensional figure.

## less than

## less than


$3<5$


Less than is used to compare two numbers when the first number is smaller than the
second number.

## like denominators

## like denominators <br> 

like denominators


Denominators in two or more fractions that are the same.

## like numerators

like numerators

like numerators


Numerators in two or more fractions that are the same.

## line

line
line

A set of connected points continuing without end in both directions.

## line of symmetry

line of

# symmetry 


line of symmetry


A line that divides a figure into two congruent halves that are mirror images of each other.

## line plot

## line plot


line plot


A diagram showing frequency of data on a number line.

## line segment

line

## segment


segment

## line <br> segment <br>  <br> A part of a line with two endpoints. <br> segment

## line-symmetric figure

line-symmetric figure


# line-symmetric figure 



A figure that can be folded in half and its two parts match exactly.

## line symmetry

line

> symmetry

line


What a figure has if it can be folded in half and its two parts match exactly.

## liter (L)

large bottle of soda or
bottle of water

## liter (L)

large bottle of soda or

## liter (L)

bottle of water


The basic unit of capacity in the metric system.
1 liter $=1,000$ milliliters

## lowest terms

## lowest terms <br>  <br> 


$\frac{4}{8}$ in lowest terms is $\frac{1}{2}$.

When a fraction is expressed with the fewest possible pieces, it is in lowest terms.
(also known as simplest form)

